

SEQUENCE LISTING

<110> Aventis Pharma Deutschland GmbH

<120> Process for identifying modulators of G protein coupled
receptors

<130> AVE D-2000/A033 englisch

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<170> PatentIn Ver. 2.1

<210> 1

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<212> DNA

<213> Mus musculus

<400> 1

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<212> PRT

<213> Mus musculus

<400> 2

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| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Glu | Ala | Arg | Arg | Ile | Asn | Asp | Glu | Ile | Glu | Arg | His | Val | Arg | Arg | Asp |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Lys | Arg | Asp | Ala | Arg | Arg | Glu | Leu | Lys | Leu | Leu | Leu | Leu | Gly | Thr | Gly |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Glu | Ser | Gly | Lys | Ser | Thr | Phe | Ile | Lys | Gln | Met | Arg | Ile | Ile | His | Gly |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ser | Gly | Tyr | Ser | Asp | Glu | Asp | Lys | Arg | Gly | Phe | Thr | Lys | Leu | Val | Tyr |
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| Gln | Asn | Ile | Phe | Thr | Ala | Met | Gln | Ala | Met | Ile | Arg | Ala | Met | Asp | Thr |
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| Leu | Lys | Ile | Pro | Tyr | Lys | Tyr | Glu | His | Asn | Lys | Ala | His | Ala | Gln | Leu |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Arg | Glu | Val | Asp | Val | Glu | Lys | Val | Ser | Ala | Phe | Glu | Asn | Pro | Tyr |
| | 115 | | | | | | 120 | | | | | 125 | | | |
| Val | Asp | Ala | Ile | Lys | Ser | Leu | Trp | Asn | Asp | Pro | Gly | Ile | Gln | Glu | Cys |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Tyr | Asp | Arg | Arg | Arg | Glu | Tyr | Gln | Leu | Ser | Asp | Ser | Thr | Lys | Tyr | Tyr |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Leu | Asn | Asp | Leu | Asp | Arg | Val | Ala | Asp | Pro | Ala | Tyr | Leu | Pro | Thr | Gln |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Gln | Asp | Val | Leu | Arg | Val | Arg | Val | Pro | Thr | Thr | Gly | Ile | Ile | Glu | Tyr |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Pro | Phe | Asp | Leu | Gln | Ser | Val | Ile | Phe | Arg | Met | Val | Asp | Val | Gly | Gly |
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| Gln | Arg | Ser | Glu | Arg | Arg | Lys | Trp | Ile | His | Cys | Phe | Glu | Asn | Val | Thr |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Ser | Ile | Met | Phe | Leu | Val | Ala | Leu | Ser | Glu | Tyr | Asp | Gln | Val | Leu | Val |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 |
| Glu | Ser | Asp | Asn | Glu | Asn | Arg | Met | Glu | Glu | Ser | Lys | Ala | Leu | Phe | Arg |
| | | | | 245 | | | | | 250 | | | | | 255 | |

Thr Ile Ile Thr Tyr Pro Trp Phe Gln Asn Ser Ser Val Ile Leu Phe
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Leu Asn Lys Lys Asp Leu Leu Glu Glu Lys Ile Met Tyr Ser His Leu
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Val Asp Tyr Phe Pro Glu Tyr Asp Gly Pro Gln Arg Asp Ala Gln Ala
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Ala Arg Glu Phe Ile Leu Lys Met Phe Val Asp Leu Asn Pro Asp Ser
 305 310 315 320

Asp Lys Ile Ile Tyr Ser His Phe Thr Cys Ala Thr Asp Thr Glu Asn
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Leu Lys Glu Tyr Asn Leu Val
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<212> DNA

<213> Mus musculus

<400> 3

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<213> Mus musculus

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Phe Ile Lys Gln Met Arg Ile Ile His Gly Ser Gly Tyr Ser Asp Glu
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Asp Lys Arg Gly Phe Thr Lys Leu Val Tyr Gln Asn Ile Phe Thr Ala
65 70 75 80

Met Gln Ala Met Ile Arg Ala Met Asp Thr Leu Lys Ile Pro Tyr Lys
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Tyr Glu His Asn Lys Ala His Ala Gln Leu Val Arg Glu Val Asp Val
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Glu Lys Val Ser Ala Phe Glu Asn Pro Tyr Val Asp Ala Ile Lys Ser
115 120 125

Leu Trp Asn Asp Pro Gly Ile Gln Glu Cys Tyr Asp Arg Arg Arg Glu
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Tyr Gln Leu Ser Asp Ser Thr Lys Tyr Tyr Leu Asn Asp Leu Asp Arg
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Val Ala Asp Pro Ala Tyr Leu Pro Thr Gln Gln Asp Val Leu Arg Val
165 170 175

Arg Val Pro Thr Thr Gly Ile Ile Glu Tyr Pro Phe Asp Leu Gln Ser
180 185 190

Val Ile Phe Arg Met Val Asp Val Gly Gly Gln Arg Ser Glu Arg Arg
195 200 205

Lys Trp Ile His Cys Phe Glu Asn Val Thr Ser Ile Met Phe Leu Val
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 35 40 45
 Phe Ile Lys Gln Met Arg Ile Ile His Gly Ser Gly Tyr Ser Asp Glu
 50 55 60
 Asp Lys Arg Gly Phe Thr Lys Leu Val Tyr Gln Asn Ile Phe Thr Ala
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 Met Gln Ala Met Ile Arg Ala Met Asp Thr Leu Lys Ile Pro Tyr Lys
 85 90 95
 Tyr Glu His Asn Lys Ala His Ala Gln Leu Val Arg Glu Val Asp Val
 100 105 110
 Glu Lys Val Ser Ala Phe Glu Asn Pro Tyr Val Asp Ala Ile Lys Ser
 115 120 125
 Leu Trp Asn Asp Pro Gly Ile Gln Glu Cys Tyr Asp Arg Arg Arg Glu
 130 135 140
 Tyr Gln Leu Ser Asp Ser Thr Lys Tyr Tyr Leu Asn Asp Leu Asp Arg
 145 150 155 160
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 165 170 175
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atgcaggcca tgatcagagc catggacaca ctcaagatcc catacaagta tgaqcacaat 300
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Glu Leu Lys Leu Leu Leu Leu Gly Thr Gly Glu Ser Gly Lys Ser Thr
35 40 45

Phe Ile Lys Gln Met Arg Ile Ile His Gly Ser Gly Tyr Ser Asp Glu
50 55 60

Asp Lys Arg Gly Phe Thr Lys Leu Val Tyr Gln Asn Ile Phe Thr Ala
65 70 75 80

Met Gln Ala Met Ile Arg Ala Met Asp Thr Leu Lys Ile Pro Tyr Lys
85 90 95

Tyr Glu His Asn Lys Ala His Ala Gln Leu Val Arg Glu Val Asp Val
100 105 110

Glu Lys Val Ser Ala Phe Glu Asn Pro Tyr Val Asp Ala Ile Lys Ser
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Leu Trp Asn Asp Pro Gly Ile Gln Glu Cys Tyr Asp Arg Arg Arg Glu
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<211> 374
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| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asp | Glu | Lys | Ala | Ala | Ala | Arg | Val | Asp | Gln | Glu | Ile | Asn | Arg | Ile | Leu |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Leu | Glu | Gln | Lys | Lys | Gln | Asp | Arg | Gly | Glu | Leu | Lys | Leu | Leu | Leu | Leu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gly | Pro | Gly | Glu | Ser | Gly | Lys | Ser | Thr | Phe | Ile | Lys | Gln | Met | Arg | Ile |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ile | His | Gly | Ala | Gly | Tyr | Ser | Glu | Glu | Glu | Arg | Lys | Gly | Phe | Arg | Pro |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Leu | Val | Tyr | Gln | Asn | Ile | Phe | Val | Ser | Met | Arg | Ala | Met | Ile | Glu | Ala |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Met | Glu | Arg | Leu | Gln | Ile | Pro | Phe | Ser | Arg | Pro | Glu | Ser | Lys | His | His |

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | | 100 | | | | | 105 | | | | | | | 110 |
| Ala | Ser | Leu | Val | Met | Ser | Gln | Asp | Pro | Tyr | Lys | Val | Thr | Thr | Phe | Glu | |
| | | 115 | | | | | 120 | | | | | 125 | | | | |
| Lys | Arg | Tyr | Ala | Ala | Ala | Met | Gln | Trp | Leu | Trp | Arg | Asp | Ala | Gly | Ile | |
| | 130 | | | | | 135 | | | | | 140 | | | | | |
| Arg | Ala | Cys | Tyr | Glu | Arg | Arg | Arg | Glu | Phe | His | Leu | Leu | Asp | Ser | Ala | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | |
| Val | Tyr | Tyr | Leu | Ser | His | Leu | Glu | Arg | Ile | Thr | Glu | Glu | Gly | Tyr | Val | |
| | | | | 165 | | | | | 170 | | | | | 175 | | |
| Pro | Thr | Ala | Gln | Asp | Val | Leu | Arg | Ser | Arg | Met | Pro | Thr | Thr | Gly | Ile | |
| | | | 180 | | | | | 185 | | | | | 190 | | | |
| Asn | Glu | Tyr | Cys | Phe | Ser | Val | Gln | Lys | Thr | Asn | Leu | Arg | Ile | Val | Asp | |
| | 195 | | | | | | 200 | | | | | 205 | | | | |
| Val | Gly | Gly | Gln | Lys | Ser | Glu | Arg | Lys | Lys | Trp | Ile | His | Cys | Phe | Glu | |
| | 210 | | | | | 215 | | | | | 220 | | | | | |
| Asn | Val | Ile | Ala | Leu | Ile | Tyr | Leu | Ala | Ser | Leu | Ser | Glu | Tyr | Asp | Gln | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| Cys | Leu | Glu | Glu | Asn | Asn | Gln | Glu | Asn | Arg | Met | Lys | Glu | Ser | Leu | Ala | |
| | | | | 245 | | | | | 250 | | | | | 255 | | |
| Leu | Phe | Gly | Thr | Ile | Leu | Glu | Leu | Pro | Trp | Phe | Lys | Ser | Thr | Ser | Val | |
| | | | 260 | | | | | 265 | | | | | 270 | | | |
| Ile | Leu | Phe | Leu | Asn | Lys | Thr | Asp | Ile | Leu | Glu | Glu | Lys | Ile | Pro | Thr | |
| | 275 | | | | | | 280 | | | | | 285 | | | | |
| Ser | His | Leu | Ala | Thr | Tyr | Phe | Pro | Ser | Phe | Gln | Gly | Pro | Lys | Gln | Asp | |
| | 290 | | | | | 295 | | | | | 300 | | | | | |
| Ala | Glu | Ala | Ala | Lys | Arg | Phe | Ile | Leu | Asp | Met | Tyr | Thr | Arg | Met | Tyr | |
| 305 | | | | | 310 | | | | | 315 | | | | | 320 | |
| Thr | Gly | Cys | Val | Asp | Gly | Pro | Glu | Gly | Ser | Lys | Lys | Gly | Ala | Arg | Ser | |
| | | | | 325 | | | | | 330 | | | | | 335 | | |
| Arg | Arg | Leu | Phe | Ser | His | Tyr | Thr | Cys | Ala | Thr | Asp | Thr | Gln | Asn | Ile | |
| | | | 340 | | | | | 345 | | | | | 350 | | | |
| Arg | Lys | Val | Phe | Lys | Asp | Val | Arg | Asp | Ser | Val | Leu | Ala | Arg | Tyr | Leu | |



Asp Glu Ile Asn Leu Leu
370

[illegible]